

CLAIMS

We claim:

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1. A polymeric container for holding a fluid and a gas, comprising:
 - a top, a base, and an upstanding wall connected therebetween;
 - said container having a volume;
 - said base having:
 - an annular outer ridge which protrudes away from said top, said outer ridge defining a plane upon which said container may rest;
 - a dome connected to said outer ridge wherein said dome is disposed within said outer ridge, said dome protruding away from said top, said dome having an apex which resides between said top and said plane; and,
 - a flexible annular joint connecting said outer ridge and said dome, said annular joint forming an inner ridge which protrudes toward said top; and,
 - wherein when (1) the fluid is heated and the heated fluid and the gas are injected into said container, and (2) said top of said container is then sealed, and (3) the fluid and gas within said container are then allowed to cool, during cooling said dome moves toward said top
 - thereby reducing said volume of said container.
2. The polymeric container according to Claim 1, further including:
 - said upstanding wall including a substantially cylindrical portion; and,
 - a plurality of internally protruding diagonal ridges disposed upon said cylindrical portion.
3. The polymeric container according to Claim 1, further including:
 - when the heated fluid and the gas are injected into said container, said base of said container resisting movement away from said top.

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4. The polymeric container according to Claim 1, further including:

said upstanding wall including a substantially cylindrical portion;

a plurality of internally protruding diagonal ridges disposed upon said cylindrical portion; and,

when the heated fluid and the gas are injected into said container, said base of said container resisting movement away from said top.

5. A method of filling a container, comprising:

(a) providing a polymeric container, including:

-a top, a base, and an upstanding wall connected therebetween;

-said container having a volume;

-said base having:

-an annular outer ridge which protrudes away from said top, said outer ridge defining a plane upon which said container may rest;

-a dome connected to said outer ridge wherein said dome is disposed within said outer ridge, said dome protruding away from said top, said dome having an apex which resides between said top and said plane;

and,

-a flexible annular joint connecting said outer ridge and said dome, said annular joint forming an annular inner ridge which protrudes toward said top;

(b) providing a fluid and a gas;

(c) heating said fluid;

(d) injecting said heated fluid and said gas into said container;

(e) sealing said top of said container;

(f) allowing said fluid and gas within said container to cool; and,

(g) observing that during (f) said dome moves toward said top thereby reducing said volume of said container.

6. The method of Claim 5, further including:

in (a), said upstanding wall including a substantially cylindrical portion; and,
a plurality of internally protruding diagonal ridges disposed upon said cylindrical
portion.

5 7. The method of Claim 5, further including:

in (d), when said heated fluid and said gas are injected into said container, said base of
said container resisting movement away from said top.